Message

From: Andrew S. Barren [andrew.s.barren@gm.com]

Sent: 12/9/2014 8:11:15 PM

To: Wright, DavidA [/o=ExchangeLabs/ou=Exchange Administrative Group

(FYDIBOHF23SPDLT)/cn=Recipients/cn=4f14a47c701547479b12bee35117d0a9-Wright, David A.]

Subject: RE: Andy Barren (GM) Meeting request

Sounds good. Either time works. Thanks.

Andy

Sent from my Android phone using TouchDown (www.nitrodesk.com)

----Original Message----

From: Wright, DavidA [Wright.DavidA@epa.gov] **Received:** Tuesday, 09 Dec 2014, 3:09pm

To: Andrew S. Barren [andrew.s.barren@gm.com] **Subject:** RE: Andy Barren (GM) Meeting request

Andy,

How about Wednesday, December 17th at 9:30 or 10?

Regards,

David

From: Andrew S. Barren [mailto:andrew.s.barren@gm.com]

Sent: Tuesday, December 09, 2014 9:21 AM

To: Wright, DavidA

Subject: RE: Andy Barren (GM) Meeting request

David,

This week just caved in on me – so Thursday isn't the best for me too. I know you offered next Monday, but is Tuesday afternoon available? Other options (in order of preference) would be Tuesday morning, then Weds or Thursday. Monday isn't good for me.

I think we should set up a separate PHEV meeting to cover that topic appropriately. In the meantime, we can try to get you some pre-material we covered with EPA staff back in MY11 when we first started using the Calif GM-modified PHEV test procedures.

Ammonia – I understand the reg requirement, what I'm looking for is documentation on the level, on what test(s), and are there any limitations (diesel with SCR only, diesels only, diesel and gas, ?????)

EGR Usage – yes, ARB is using the AECD rule to demand EGR be on at all times. I believe it's an abuse of the regulation (and I've discussed that with them). I have about a 30 minute pitch to explain that, on LD vehicles with SCR, the use of EGR is not necessary to stay compliant.

I'll have to think about the other topics. Thanks,

Andy

From: Wright, DavidA [mailto:Wright.DavidA@epa.gov]

Sent: Friday, December 05, 2014 5:16 PM

To: Andrew S. Barren

Cc: Randall C. Harvey; Robert A. Mathis; Ball, Joel Subject: RE: Andy Barren (GM) Meeting request

Andy,

The times you have listed on Thursday will not work for me. I am available from 11 until noon if that would work for you. If that does not work for you, the next best day is Monday, December 15th. Let me know what would be better for you. And, hopefully we can have some e-mail exchanges to reduce the number of topics needing meeting time.

Ammonia slip from SCR systems is covered in 86.1810-01(a) regarding the emission into the ambient air of noxious and toxic substances that would not be emitted if the device was not present.

I have traded notes with Dave McGuire regarding PHEV testing and some of the issues encountered when EPA has performed confirmatory tests on GM vehicles. I agree that it would be good to discuss the procedures, but, it would probably be best to have our PHEV/BEV testing staff involved in that conversation. I am familiar with the SAE procedures for PHEVs and BEVs, but, am not familiar with the California procedures. It would be beneficial for GM to provide any California procedure or GM modified procedures for myself and our testing staff to review prior to meeting. A reference to a web location would suffice assuming the California procedures are finalized and published.

Do you have a specific question regarding test fuel requirements for certification?

Can you provide any further background on the ARB EGR usage requirement? Is it an AECD concern?

I am not familiar with the HD diesel AECD format, I will confer with Steve Healy. When you describe the Cruze diesel AECD format, I assume you are referring to the document GM provided last year?

Hopefully some further e-mail exchanges, if necessary, will reduce the punishment – at this time I do not have any issues for expanding the list.

Regards,

David

David A. Wright Light-Duty Vehicle Center, Compliance Division National Vehicle and Fuel Emissions Laboratory

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E-mail: wright.davida@epa.gov

From: Andrew S. Barren [mailto:andrew.s.barren@gm.com]

Sent: Tuesday, December 02, 2014 9:56 PM

To: Wright, DavidA

Cc: Randall C. Harvey; Robert A. Mathis **Subject:** Andy Barren (GM) Meeting request

David,

Is there any chance you have an hour to spare next Thursday, December 11, from 1-2pm or 2-3pm? Per our previous discuss, I'd like to cover topics dealing with future certification direction. My "David Wright List" consists of:

- What is the ammonia slip requirement for diesels, and where is it documented
- PHEV test procedures, and timing with respect to California's test procedures
- The allowable test fuel for certification (I think this is an easy one since reciprocity is in place)
- Diesel EGR use. ARB expects us to flow EGR at all operating conditions we disagree and have data that indicates that we can meet emissions without EGR at certain operating conditions (using UREA).
- What are the Bin110 SFTP standards (use a FEL or c/o Tier 2 requirements)?
- Want to confirm Bin395 can be done at 120K useful life. But if done at 150K then it counts as a Tier 3.
- AECD documentation. Can we use the Cruze diesel AECD format and not the onerous HD diesel format for LD Duramax truck applications?

I think that's enough punishment for both of us for one meeting. Please let me know if either timeslot works for you, or if you have an alternative day/time that is better. Also, if you want expansion on the above list, please let me know. As always, I appreciate your time.

Technical Fellow - Emissions Regulations
andrew.s.barren@gm.com
T 248,388,8253 C 248,388,8253
C Britishing want helpings. The first phonons are usual, manue, makes the plant to be round to all mades.

Andrew S. Barren

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